

What is claimed is:

1. A method for comparing a first location and a second location, comprising,
 - generating a first binary representation from geographic information based on the first location,
 - generating a second binary representation from geographic information based on the second location,
 - performing a bitwise comparison between the first binary representation and the second binary representation ,
 - and,
 - associating the bits of the bitwise comparison to derive a distance measure.
2. A method according to claim 1, further including,
 - encrypting at least one of the first binary representation and the second binary representation,
 - and wherein performing a bitwise comparison further includes performing a bitwise comparison of at least one of the encrypted first binary representation and the encrypted second binary representation.
3. A method according to claim 1, further including,
 - receiving a criteria, and
 - comparing the bitwise comparison to the criteria.

4. A method according to claim 1, further including,
receiving a criteria, and
comparing the distance measure to the criteria.
5. A method according to claim 1, further including,
receiving a threshold, and,
comparing the bitwise comparison to the threshold.
6. A method according to claim 1, further including,
receiving a threshold, and,
comparing the distance measure to the threshold.
7. A method according to claim 1, wherein performing a bitwise comparison includes computing an exclusive OR operation.
8. A method according to claim 1, wherein generating a first binary representation includes generating a first binary code based on at least one of latitude, longitude, direction, parcel, ward, street address, town, city, zip code, telephone number, area code, destination, and directional information.
9. A method according to claim 1, wherein generating a second binary representation includes generating a second binary code based on at least one of latitude, longitude, direction, parcel, ward, street address, town, city, zip code, telephone number, area code, destination, and directional information.

10. A method according to claim 2, wherein encrypting the at least one of first binary representation and the second binary representation further includes altering the precision of at least one of the first binary representation and the second binary representation.

11. A method according to claim 1, further including associating a probability with at least one of the bitwise comparison and the distance measure.

12. A method according to claim 11, further including comparing the probability to a threshold.

13. A method according to claim 1, further including associating an uncertainty with at least one of the first binary representation and the second binary representation.

14. A method according to claim 1, further including associating an uncertainty with the bitwise comparison.

15. A method for identifying at least one provider in response to a consumer request, comprising:

associating a geographic token with the consumer request,
associating a criteria with the consumer request,

comparing the consumer geographic token with at least one provider geographic token to provide at least one token comparison result, and,
comparing the at least one token comparison result to the criteria to identify at least one provider.

16. A method according to claim 15, further comprising providing a database of provider geographic tokens.

17. A method according to claim 15, wherein associating a geographic token with the consumer request includes generating a binary representation of geographic information.

18. A method according to claim 15, wherein associating a criteria with the consumer request includes providing at least one of a threshold and a category of provider.

19. A method according to claim 15, wherein associating a criteria with the consumer request includes providing a probability threshold.

20. A method according to claim 15, wherein comparing the consumer geographic token with at least one provider geographic token includes performing a binary comparison of the consumer geographic token and the at least one provider geographic token.

21. A method according to claim 15, wherein comparing the at least one token comparison result to the criteria to identify at least one provider includes computing a probability measure.

22. A method according to claim 15, further comprising associating an identity with the provider geographic tokens.

23. A method according to claim 15, wherein comparing the at least one token comparison result to the criteria to identify at least one provider includes associating an identity to the at least one provider for which the comparison result satisfies the criteria.

24. A method according to claim 15, further including receiving consumer-specific information.

25. A method according to claim 15, further including filtering the at least one identified provider using consumer-specific information.

26. A method according to claim 25, wherein filtering further includes filtering based on at least one of geographical information and demographic data.

27. A method for responding to a request for geographically relevant data, comprising,

providing a database having provider geographic tokens and
associated provider identities,
identifying a geographic token associated with the request,
determining whether one or more geographic tokens from the
database should be selected based on the request,
comparing the geographic token associated with the request,
to the selected geographic tokens,
based on the comparison, providing provider identities in
response to the request.

28. A method according to claim 27, wherein providing a
geographic token associated with the request includes generating
a binary code based on geographic information associated with the
request.

29. A method according to claim 27, wherein determining whether
one or more geographic tokens should be selected from the
database includes selecting geographic tokens from the database
based on at least one criterion of provider.

30. A method according to claim 27, wherein comparing the
geographic token based on the request, to the selected geographic
tokens includes performing a binary comparison.

31. A method according to claim 27, wherein comparing the geographic token based on the request, to the selected geographic tokens includes performing an exclusive OR (XOR).

32. A method according to claim 27, wherein providing provider identities in response to the request includes comparing the comparison results to a threshold.

33. A method according to claim 27, wherein providing provider identities in response to the request includes computing a probability based on at least one of the tokens.

34. A system for responding to a request for geographically relevant data, comprising,

at least one database having at least one provider token and a provider identity associated with the at least one provider token,

a processor in communication with the at least one database and configured to process the request and at least one of a geographic token and geographic information that can be converted to a geographic token, the processor further including instructions for comparing the geographic token with at least one provider token to determine provider tokens having geographically relevant data.

35. A system according to claim 34, wherein the system further includes instructions for causing the processor to compute a probability based on the comparison.

36. A system according to claim 34, wherein the request further includes at least one geographic criterion.

37. A system according to claim 34, wherein the processor receives the request via a network.

38. A system according to claim 34, wherein the processor communicates with the database over a network.

39. A system according to claim 34, further including a probability threshold to apply against the comparison.

40. A system for identifying at least one provider in response to a consumer request, comprising:

means for generating the consumer request and associating with the consumer request at least one of a geographic token and geographic information for computing a geographic token,

means for associating a criteria with the consumer request,

means for providing at least one provider geographic token,

means for comparing the consumer geographic token with at least one provider geographic token to provide at least one token comparison result, and,
means for comparing the at least one token comparison result to the criteria to identify at least one provider.

41. A system according to claim 40, wherein the means for providing the consumer request includes an internet-accessible device.

42. A system according to claim 40, wherein the means for providing at least one provider geographic token includes a database.

43. A system according to claim 40, wherein the means for providing includes an internet-accessible device.

44. A system according to claim 40, wherein the means for comparing includes a comparator.

45. A system according to claim 40, wherein the means for comparing includes an exclusive OR operation.

46. A system according to claim 40, further including means for computing a probability measure associated with the at least one token comparison result.

47. A system according to claim 40, further including means for computing a probability measure associated with at least one of the consumer geographic token and the provider geographic token.

48. A computer program product for comparing a first location and a second location, the product disposed on a computer readable medium and having instructions for causing a processor to,

generate a first binary representation from geographic information based on the first location,
generate a second binary representation from geographic information based on the second location,
perform a bitwise comparison between the first binary representation and the second binary representation ,
and,
associate the bits of the bitwise comparison to derive a distance measure.

49. A computer product according to claim 48, further including instructions for causing the processor to,
encrypt at least one of the first binary representation and the second binary representation,
and wherein the instructions to perform a bitwise comparison further include instructions to perform a bitwise comparison of at least one of the encrypted first

binary representation and the encrypted second binary representation.

50. A computer product according to claim 48, further including instructions for causing the processor to,

receive a criteria, and

compare the bitwise comparison to the criteria.

51. A computer product according to claim 48, further including instructions for causing the processor to,

receive a criteria, and

compare the distance measure to the criteria.

52. A computer product according to claim 48, further including instructions for causing the processor to,

receive a threshold, and,

compare the bitwise comparison to the threshold.

53. A computer product according to claim 48, further including instructions for causing the processor to,

receive a threshold, and,

compare the distance measure to the threshold.

54. A computer product according to claim 48, wherein instructions to perform a bitwise comparison includes instructions to compute an exclusive OR operation.

55. A computer product according to claim 48, wherein instructions to generate a first binary representation include instructions to generate a first binary code based on at least one of latitude, longitude, direction, parcel, ward, street address, town, city, zip code, telephone number, area code, destination, and directional information.

56. A computer product according to claim 48, wherein instructions to generate a second binary representation includes instructions to generate a second binary code based on at least one of latitude, longitude, direction, parcel, ward, street address, town, city, zip code, telephone number, area code, destination, and directional information.

57. A method according to claim 49, wherein instructions to encrypt at least one of the first binary representation and the second binary representation further include instructions to alter the precision of at least one of the first binary representation and the second binary representation.

58. A computer product according to claim 48, further including instructions for causing the processor to associate a probability with at least one of the bitwise comparison and the distance measure.

59. A computer product according to claim 481, further including instructions for causing the processor to compare the probability to a threshold.

60. A computer product according to claim 48, further including instructions for causing the processor to associate an uncertainty with at least one of the first binary representation and the second binary representation.

61. A computer product according to claim 48, further including instructions for causing the processor to associate an uncertainty with the bitwise comparison.

62. A computer product for identifying at least one provider in response to a consumer request, the computer product disposed on a computer readable medium and having instructions for causing a processor to:

- associate a geographic token with the consumer request,
- associate a criteria with the consumer request,
- compare the consumer geographic token with at least one provider geographic token to provide at least one token comparison result, and,
- compare the at least one token comparison result to the criteria to identify at least one provider.

63. A computer product according to claim 62, further comprising instructions for causing the processor to access a database of provider geographic tokens.

64. A computer product according to claim 62, wherein instructions to associate a geographic token with the consumer request includes instructions for causing the processor to generate a binary representation of geographic information.

65. A computer product according to claim 62, wherein instructions to associate a criteria with the consumer request includes instructions to provide at least one of a threshold and a category of provider.

66. A computer product according to claim 62, wherein instructions to associate a criteria with the consumer request includes instructions to provide a probability threshold.

67. A computer product according to claim 62, wherein instructions to compare the consumer geographic token with at least one provider geographic token include instructions to perform a binary comparison of the consumer geographic token and the at least one provider geographic token.

68. A computer product according to claim 62, wherein instructions to compare the at least one token comparison result

to the criteria to identify at least one provider include instructions to compute a probability measure.

69. A computer product according to claim 62, further comprising instructions for causing the processor to associate an identity with the provider geographic tokens.

70. A computer product according to claim 62, wherein instructions to compare the at least one token comparison result to the criteria to identify at least one provider include instructions to associate an identity to the at least one provider for which the comparison result satisfies the criteria.

71. A computer product according to claim 62, further including instructions for causing the processor to receive consumer-specific information.

72. A computer product according to claim 62, further including instructions for causing the processor to filter the at least one identified provider using consumer-specific information.

73. A method according to claim 25, wherein instructions to filter further include instructions to filter based on at least one of geographical information and demographic data.

74. A computer product for responding to a request for geographically relevant data, the computer product disposed on a computer readable medium and having instructions for causing a processor to:

provide a database having provider geographic tokens and associated provider identities,
identify a geographic token associated with the request,
determine whether one or more geographic tokens from the database should be selected based on the request,
compare the geographic token associated with the request, to the selected geographic tokens,
based on the comparison, provide provider identities in response to the request.

75. A computer product according to claim 74, wherein instructions to provide a geographic token associated with the request include instructions to generate a binary code based on geographic information associated with the request.

76. A computer product according to claim 74, wherein instructions for causing the processor to determine whether one or more geographic tokens should be selected from the database include instructions to select geographic tokens from the database based on at least one criterion of provider.

77. A computer product according to claim 74, wherein instructions to compare the geographic token based on the request, to the selected geographic tokens include instructions to perform a binary comparison.

78. A computer product according to claim 74, wherein instructions to compare the geographic token based on the request, to the selected geographic tokens include instructions to perform an exclusive OR (XOR).

79. A computer product according to claim 74, wherein instructions to provide provider identities in response to the request include instructions to compare the comparison results to a threshold.

80. A computer product according to claim 74, wherein instructions to provide provider identities in response to the request include instructions to compute a probability based on at least one of the tokens.